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ABSTRACT

Designing and Implementing Programs for the Little School Component is a program funded under Elementary Secondary Education Act Title III and designed to develop, implement, and disseminate a program of individualized instruction at the Howard D. Woodson Senior High School. This program is a third year continuation of the program initiated in 1972-73. The original 300 students entering as 10th graders in 1972-73 have continued in the program and are now in their senior year. The third year program was expected to complete the development of pilot experiences for staff and students alike in the development and implementation of individualized programs. The current year program was designed to be conducted in four phases described in the project proposal: Articulation and Planning Session, Implementation of the Little School Component, School-Year Workshop and Staff Development, and Evaluation and Redesign. Phases 2-4 were in effect concurrently from the beginning of the 1974-75 academic year while Phase 1 was conducted during the summer of 1974. The results of the evaluation discussed here are considered to clearly indicate support for the Little School Component's achievement of its goals, particulary in the areas of developing a viable program of individualized instruction and in creating a positive atmosphere for learning. (Author/JM)

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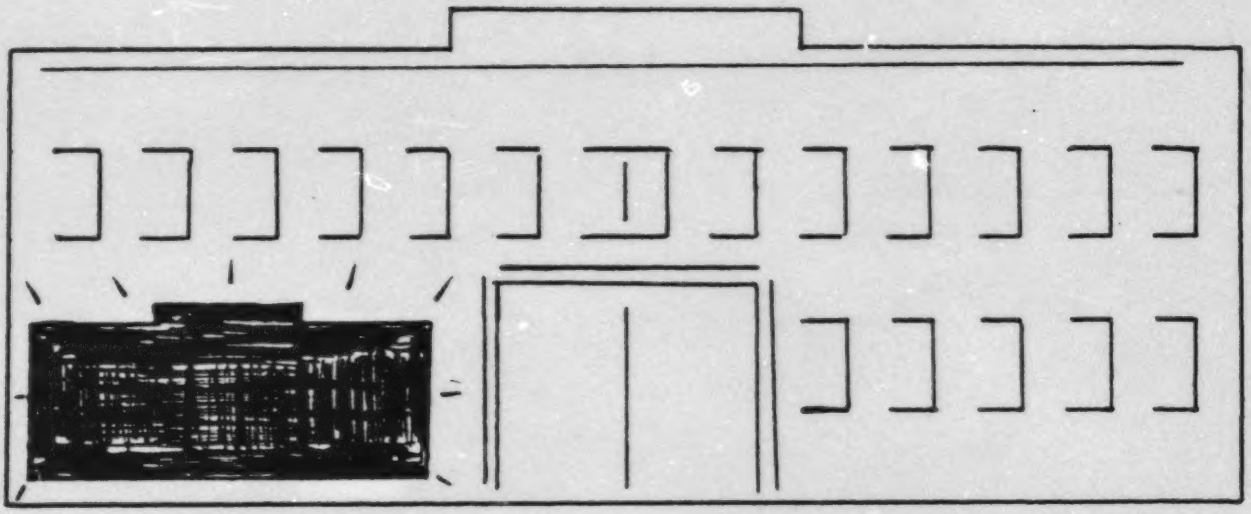
Public Schools of the District of Columbia

DESIGNING AND IMPLEMENTING LITTLE SCHOOL COMPONENTS

ESEA TITLE III EVALUATION FINAL REPORT



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1975

EVALUATION OF THE PROGRAM: "DESIGNING AND IMPLEMENTING PROGRAMS FOR THE LITTLE SCHOOL COMPONENT"

TITLE III EVALUATION PROJECT

FINAL REPORT

Division of Research and Evaluation,
Public Schools of the District of
Columbia, Washington D.C.

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G & G Associates, Inc.
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CHAPTER I
DESCRIPTION OF THE PROJECT

Designing and Implementing Programs for the Little School Component is a program designed to develop, implement, and disseminate a program of individualized instruction at the Howard D. Woodson Senior High School. This program is a third year continuation of the program initiated in 1972-73. Original students were selected in 1972-73 from student listings supplied by feeder-school counselors. The 300 students originally entering as 10th graders in 1972-73 have continued in the program and are now in their senior year. The third year program was expected to complete the development of pilot experiences for staff and students alike in the development and implementation of individualized programs.

The current year program was designed to be conducted in four phases described in the project proposal:

Phase I - Articulation and Planning Session
Phase II - Implementation of the Little School Component
Phase III - School-Year Workshop and Staff Development
Phase IV - Evaluation and Redesign.

Phases II - IV were in effect concurrently from the beginning of the 1974-75 academic year while Phase I was conducted during the Summer 1974.

Phase I - Orientation and Planning Session

Phase I involved concurrent workshops and training sessions for eleven current teachers, one counselor, one librarian, one teacher-coordinator, an assistant principal for instruction, and six new teachers. All teachers functioned in teams in all phases of planning and organization. Within this period the staff was involved in workshop training sessions and the preparation and development of learning materials. The counselor and the reading teacher-specialist were involved in communicating with parents and students, interpreting the program, testing in reading, assessing student groups, organizing and studying student records for the purpose of identifying and assessing student needs (reading levels, learning difficulties, social problems, etc.), and refining and further developing student profiles.

Phase I focused on assessing space utilization under various learning conditions; identifying performance objectives and curriculum design in different subject areas; investigating and locating the resources and materials to be used in the classroom; orienting and assembling students; planning, developing, and organizing a curriculum laboratory and a central instructional materials center; and organizing and developing an intensive counseling program.

Phase I involved an initial preparatory workshop session and concurrent continued workshop, training and planning sessions with Phase III.

Phase II - Implementing the Little School Component

For the school year 1974-75, the Little School Component provided individualized instruction for 270 twelfth grade students. The teachers involved in Phase I were a part of the residential staff.

Component course offerings were determined by data compiled in the first two pilot years from the following sources:

(1) student interests as projected from feedback given in student opinionnaires, student conferences, and course elective reports;
(2) recommendations from the teaching and guidance staff based on observations and recognition of needed changes made apparent by pilot experiences during the first two years;
(3) expressed and recognized needs of students in the various academic areas on in-depth student assessment.

The guidance staff continued to develop and implement an ongoing program for intensified counseling and pupil assessment; work with the teaching staff in cluster groupings to develop and implement the teacher-advisor role in order to make professional counseling services more available to students and teaching staff; assist the instructional staff in identifying and solving immediate and ongoing problems; coordinate and establish lines of communication between parents, students, teachers and community; formulate and affect basic objectives for a more humane educational and social instructional program for Woodson students, and the Woodson community; serve as a liaison media for immediate feed back to the instructional staff, the teacher-coordinator, and the administration.

Library personnel involved in Phase I continued as a part of the residential staff for the year. The library component coordinator developed, organized, and managed a curriculum laboratory and major instructional materials center utilized by students and staff.

Phase III - School-Year Workshop and Staff Development Program

Component participants were allotted six additional hours each week during the school year, not precluding daily planning sessions scheduled for all teachers, to provide additional time for continued planning, training, the exchange of ideas, and workshops. Because it was discovered in the first year pilot that certain staff activities required more time than others (planning new student grouping as opposed to discussing and solving an immediate problem of small dimensions), the component staff had the option of determining time allotments which best met the needs of the group in the workshop.

This group acted as a core for further expansion and modification of the Little School Component at Woodson High School. The school year provided a regular base for training and laboratory experiences for other Woodson teachers as well as teachers from other public schools. Ongoing workshops were held throughout the year to provide training and assistance in areas of need and to further spread innovative skills to other members of the Woodson staff.

The teacher-coordinator continued as teacher-coordinator throughout the year and assisted in identifying the needs of participating teachers, seeking resources and developing alternative strategies as issues developed. The library-coordinator was directly responsible for organizing, managing and coordinating the instructional materials center and the curriculum laboratory with all activities involved in the instructional program of the Little School Component. The counselor and coordinators worked under the direct supervision of the Assistant Principal for Instruction.

The objectives of the project, as described in the project proposal, were as follows:

(1) The instructional staff will continue to improve academic achievement utilizing an individualized program with 300 twelfth grade students currently enrolled in the Little School Component. This will be evidenced by:

a. ability of the students to function in an open space classroom;
b. pupil assessment and diagnostic teaching based on standardized tests and teacher-made criterion tests;
c. varied teaching techniques in large and small group instruction, independent study, and laboratory experiences.

(2) As a means of improving both academic achievement and student attitude, the guidance staff will develop and implement a program which will include:
a. consolidation of records;
b. teacher-advisor role to improve attendance and academic performance;
c. intensified educational counseling for students;
d. parental involvement.

(3) As a part of the individualized program, the instructional staff will develop and maintain a curriculum laboratory of resources and materials which will be tested in the classroom and used as:
a. a basis for continuous progress learning;
b. support for a flexible schedule in the future;
c. a resource for the remaining Woodson staff and other public and nonpublic schools.

Reports of the first two years of the project provided detailed descriptions of project development activities, and for this reason will not be repeated here. In reviewing these activities and the evaluation needs emphasized in earlier reports, primary focus was placed upon assessing the scope of development of individualized instruction methods and the development of attitude and self-concept measures for assessing student impact.

The evaluation of Little Schools was designed in sufficient detail to pinpoint the strengths and weaknesses of the program for continued improvement in the Woodson High School and to serve as a model for other schools who wish to undertake a program of individualized instruction. The evaluation design focused upon process variables in order to examine how students and staff adapt to a program of individualized instruction and to show how improvements can be made. Product variables, particularly student progress, achievement, and interest in school, were an integral part of the evaluation.

The objectives of the evaluation included the following:

1. To identify the participating target population of staff and students and their roles in the project.
2. To review the goals and objectives of the project and the means and methods used by the staff to reach the objectives.
3. To develop a comprehensive evaluation design that will include process variables and product variables and that will take account of factors unique to individualized open space instruction.
4. To carry out an evaluation that will aid in the redesign and replication of the program as well as reporting on the outcomes of the project.

CHAPTER II
METHODS AND PROCEDURES

This study was conducted in three phases:
(1.) project review and evaluation design;
(2.) instrumentation and data collection; and
(3.) data analysis and reporting.

Phase I, project review and evaluation design, was devoted to identifying the participating target population of staff and students and their roles in the project; reviewing the goals and objectives of the project and the means and methods used by the staff in reaching them; and the development of a comprehensive evaluation design that included process and product variables and that took account of factors unique to individualized instruction. Conferences were held with the Project Director, Assistant Projector, and representatives of the Division of Research and Evaluation to obtain a comprehensive picture of the Little School Project. Information and reports provided at these two conferences was later supplemented with other interviews and observations. The evaluation design developed called for comparative surveys of students and teachers in various attitudinal areas as well as an assessment of the Little School process dimensions.

Instrumentation (Phase II) to carry out the design involved the development of three structured questionnaires (two for students, one for teachers) interviews/observations of classes, review of instructional materials developed by the staff, an analysis of standardized test data, and a comparative analysis of absences of Component and Non-Component Students.

The General High School Program Questionnaire was designed to tap students' self-concepts in relation to schooling. This questionnaire was administered to a sample of Little School students and to a comparison sample of high school seniors at the Spingarn High School. This questionnaire served as an indirect measure of the impact of the Little Schools Component on students' attitudes and self-concepts.

The Little Schools Component Student Questionnaire was designed to obtain a direct reaction of the students to the project and was completed only by Component Students.

It was intended to have the entire population of about 270 Component students complete each of these questionnaires. However, because Component students were seniors, they were excused from classes in late May 1975 and, as a result many students

did not complete the questionnaires. It seems reasonable to assume, however, that those students who did complete the questionnaires are random samples of Component students. Final samples were 78 students (about 30%) for the General High School Program Questionnaire and 133 students (about 45%) for the Student's Questionnaire.

The Teacher's Questionnaire was designed to tap areas of individualized teaching; the teachers' perceptions of their students and classes; Component teachers' staff development needs and the Component teachers' evaluation of Little Schools. The questionnaire was completed by 11 of the 14 Component teachers, the remaining three being absent due to illness. Thirty Non-Component teachers at Woodson Senior High School completed the first two parts of the questionnaire in order to make comparative analyses of the types and variety of teaching methods used and to obtain a comparative analysis of teachers' perceptions of their students.

Direct observations were made of two ongoing classes to view the teaching methods directly and to observe the quality of student-student and student-teacher interactions. These classroom observations also provided the opportunity for spot interviews with students.

The evaluator also reviewed an audio-visual presentation of Little Schools and a substantial amount of staff developed instructional materials to assess the programmatic development of the project.

Interviews were held with the project counselors and additional interview/conferences with the Project Director and Assistant Project Director. Interviews were also planned with the teaching staff; however, scheduling problems precluded carrying out these interviews.

The original plans called for the California Tests of Basic Skills as the standardized achievement test to be administered. However, due to an administrative oversight this test battery was not administered. As an alternative, the Preliminary Scholastic Aptitude Tests (PSAT) for 1973-74 and the Scholastic Aptitude Tests (SAT) for 1974-75 were used as the pretests and posttests. Comparisons were made of the actual score gains and the percentage of Component and Non-Component students actually taking each test.

Data on absences was provided by the Assistant Project Director for nine Component and nine Non-Component sections, each with 270 students.

Data analysis (Phase III) was carried out by hand tabulations. Frequency and percentage distributions were obtained for all questionnaire items; score distributions, means and standard deviations were obtained for the General High School Program Questionnaire, and score distributions were obtained for the PSAT - SAT test results. For comparative analyses, the "t" test, z test and the sign test (a nonparametric statistic) were used to determine the statistical significance of differences.

CHAPTER III
RESULTS AND ANALYSIS OF DATA

This section provides the instruments, data analysis, and a discussion of the findings for each of the two student questionnaires devised for the project, an analysis of absences, standardized test results provided by the Project Director, an analysis of progress in developing individualized instructional materials, and the results of the teacher questionnaire. The teacher questionnaire provides a comparative analysis of Component and Non-component teachers in varied and individualized teaching practices and the teaching climate within which they work. Also provided is an assessment of staff development needs and the Component teachers' assessment of Little Schools.

Comparative Analysis of Student Attitudes

Students in the Little School Component and a control group of students from Spingarn High School were administered a questionnaire designed to tap their attitudes and their self concepts in relation to schooling. This questionnaire, called the General High School Program Questionnaire, was devised by the evaluator, based on experience with the goals of individualized programs and discussions with the Little School's project staff regarding areas of attitudinal and self-concept impact they hoped to achieve with their students. Therefore, the questionnaire can be considered a measure of behavioral student objectives for individualized programs in the affective domain. The measurement of affective changes was particularly important as the project seemed to emphasize this area more than the cognitive domain.

The questionnaire taps primarily the student's self concept in relation to his schooling (questions 1-7); two questions (8 and 10) deal with career planning, particularly appropriate to high school seniors; and one question (9) deals with the use by teachers of varied teaching techniques -- that is, teaching strategies more likely to be characteristic of individualized programs like the Little School Component.

All questions are written in such a way that they are appropriate to any student's school experience. Only two questions (8 and 10) are specific to the high school experience; the remainder would be appropriate at any level.

The questionnaires were completed by 78 Little School students, about a 30 percent sample, and by a control group of 81 seniors from Spingarn Senior High School. The control group was obtained from outside of Woodson Senior High School as the "Hawthorne effect" would be expected for non-component students within the same school. The questionnaires were administered by school personnel.

The results of the analysis are presented in Tables 1 and 2. For Table 1, each questionnaire was scored for questions 1-9. Question 10, plans for after high school, was not used in this analysis. Each item was scored as follows:

Strongly Agree	- 1
Agree	- 2
Disagree	- 3
Strongly Disagree	- 4

Thus, with a possible range of 9-36, a high score indicates a less favorable self concept, while a low score indicates a more favorable self concept.

TABLE 1

RESULTS OF THE GENERAL HIGH SCHOOL PROGRAM QUESTIONNAIRE

	COMPONENT STUDENTS	CONTROL GROUP
Mean	15.1	17.8
S.D.	3.6	3.3
N	78	81

"t" = 3.94, Significant beyond .001 level of confidence.

TABLE 2

COMPARISON OF ITEMS OF THE GENERAL HIGH SCHOOL PROGRAM QUESTIONNAIRE

Response Categories*: SA - Strongly Agree
A - Agree
D - Disagree
SD - Strongly Disagree
Bl - Blank

Item and Significance Test	RC*	Component Students f'	Component Students %	Control Students f'	Control Students %
1. I understand what my teacher expects of me.	SA	28	35.9	13	16.2
	A	50	64.1	51	63.9
	D			14	17.5
Z = 2.94, Significant	SD			1	1.2
	Bl			1	1.2
2. I have a good understanding of how I am doing in my school work.	SA	31	39.8	18	22.5
	A	44	56.4	54	67.6
	D	3	3.8	6	7.5
	SD			1	1.2
	Bl			1	1.2
Z = 2.39, Significant					
3. I believe I know how to study and learn.	SA	39	50.0	32	40.0
	A	36	46.1	43	53.7
	D	2	2.6	2	2.5
Z = 1.27, Not Significant	SD	1	1.3	0	0.0
	Bl			3	3.8
4. I am very interested in school.	SA	27	34.6	22	27.5
	A	40	51.3	36	45.0
	D	6	7.7	19	23.7
Z = 2.09, Significant	SD	4	5.1	3	3.8
	Bl	1	1.3		
5. I have had good relations with most of my teachers.	SA	42	53.9	24	30.0
	A	32	41.0	38	47.5
	D	3	3.8	15	18.3
	SD	1	1.3	3	3.7
Z = 3.10, Significant	Bl				

f' = frequency

TABLE 2 (CONTINUED)

Response Categories*: SA - Strongly Agree
A - Agree
D - Disagree
SD - Strongly Disagree
Bl - Blank

Item and Significance Test	RC*	Component Students f'	Component Students %	Control Students f'	Control Students %
6. I have learned how to take responsibility for my school work.	SA	34	43.6	23	28.8
	A	39	50.0	55	68.7
	D	3	3.8	2	2.5
	SD	2	2.6		
Z = 1.98, Significant	Bl				
7. In high school I have become more confident of my school work.	SA	32	41.0	15	18.8
	A	41	52.5	53	66.3
	D	2	2.6	10	12.5
	SD	2	2.6	1	1.2
Z = 3.14, Significant	Bl	1	1.3	1	1.2
8. My high school program has helped me make my plans for work or college after high school.	SA	25	32.0	17	21.3
	A	40	51.3	38	47.5
	D	11	14.1	20	25.0
	SD	2	2.6	4	5.0
	Bl			1	1.2
Z = 2.18, Significant					
9. My teachers in high school often used a large variety of teaching techniques such as large and small group instruction, audio-visual, individual projects and student tutors.	SA	41	52.6	8	10.0
	A	25	32.1	29	36.2
	D	9	11.5	24	30.0
	SD	3	3.8	19	23.8
	Bl				
Z = 6.45, Significant					
10. My plans for the first year after high school are:					
work		18	21.4	35	41.6
college or other training		61	72.6	40	47.6
marriage; military		4	4.8	3	3.6
Other		1	1.2	1	1.2
Blank				5	6.0
Z = 2.89, Significant					

f' = frequency

The results in Table 1 show that Little School students has a more favorable self concept than does the control group of high school seniors. This difference was statistically significant, as measured by the "t" test, beyond the .001 level of confidence.

Table 2 shows the results for each item in the questionnaire. All differences favored the Little School Component over the control group. Differences were statistically significant at the .05 level of confidence for all items except item 3.

These results show the positive effects that the Little School Component has been having on its students. These results are particularly gratifying in as much as the majority of students in the control group tended to respond positively to the questionnaire with more than three out of four control students marking the Strongly Agree or Agree response for items 1-7. Differences in the Little Schools and control groups usually were evident in the number of students marking the "Strongly Agree" response.

The following list ranks questions 1-9 in descending order, according to percent differences between the component and control students.

Item Number	Item	Percent* Difference
9	My teachers in high school often used a large variety of teaching techniques such as large and small group instruction, audio-visuals, individual projects, and student tutors.	42.6
5	I have had good relations with most of my teachers.	23.9
7	In high school I have become more confident of my school work.	22.2
1	I understand what my teacher expects of me.	19.7
2	I have a good understanding of how I am doing in my school work.	17.3
6	I have learned how to take responsibility for my school work.	14.8
8*	My high school program has helped me make out my plans for work or college after high school.	14.5
4*	I am very interested in school.	13.4
3	I believe I know how to study and learn.	10.0

*All differences are between the percent marking SA, except for items 4 and 8 which compare SA and A.

Student Reactions To The Little School Component

Little School students also completed a brief questionnaire to obtain their reactions to the program. The questionnaire was completed in May and June 1975 by a sample of 133 or about 45% of the component students. The detailed results are shown in Table 3. (Some of the items are similar to those used in the General High School Program Questionnaire.)

Of the students completing the questionnaire, over half had been in the Little School Component for the full three years, while the remainder split almost evenly between 1 and 2 years (question 1). Overall, about 64% of the students rated the Little School as "much better than the regular program," about 23% rated it "about the same," and 12% rated Little School "not as good as the regular Program" (question 15).

Questions 4 through 11 ask about personal scholastic development, relations with teachers, and reactions to teaching methods used in the Little Schools. Reactions to these questions in terms of the percentage of students marking "Strongly Agree" or "Agree" were more positive to the Little School Component than was the overall rating with about 71% to 90% reacting favorably. These questions are presented following Table 3 in rank order of the percentage marking "Strongly Agree" or "Agree."

Overall, reactions to the program are quite favorable, with at least one half of the students and as many as 9 out of 10 reacting favorably to the program. The results show: improved relations with teachers, improved self concepts in relation to schooling, positive reaction to varied teaching techniques, and perceptions of better preparation for work or college after high school.

TABLE 3

LITTLE SCHOOL COMPONENT

STUDENT QUESTIONNAIRE

Item	Response Categories	f	%
1. How long have you been in the Little School Component?	This year only:	29	21.3
	Two years:	31	23.3
	Three years:	73	54.9
	Blank:	0	0.0
2. I understand what the Little School teachers expect of me.	Better than in the regular program:	81	60.9
	Not as well as in the regular program:	15	11.3
	About the same:	37	27.8
	Blank:	0	0.0
3. I have a better understanding of how I am doing in my school work.	In the Little School Component:	67	50.3
	In the regular program:	27	20.3
	About the same:	38	28.6
	Blank:	1	0.8
4. I believe that the Little School has enabled me to study and learn more.	Strongly Agree:	15	11.3
	Agree:	89	66.9
	Disagree:	24	18.0
	Strongly Disagree:	4	3.0
	Blank:	1	0.8
5. My interest in school became higher in the Little School Component.	Strongly Agree:	16	12.0
	Agree:	93	69.9
	Disagree:	19	14.3
	Strongly Disagree:	3	2.3
	Blank:	2	1.5
6. My relations with teachers seem better for learning than in the regular program.	Strongly Agree:	16	12.0
	Agree:	104	78.2
	Disagree:	11	8.3
	Strongly Disagree:	2	1.5
	Blank:	3	2.3

f = frequency

TABLE 3 (CONTINUED)

Item	Response Categories	f	%
7. Being in the Little School Component helped me take responsibility for my school work.	Strongly Agree:	20	15.0
	Agree:	100	75.2
	Disagree:	10	7.5
	Strongly Disagree:	0	0.0
	Blank:	3	2.3
8. Being in the Little School Component has helped me be more confident of my school work.	Strongly Agree:	20	15.0
	Agree:	75	56.4
	Disagree:	31	23.3
	Strongly Disagree:	0	0.0
	Blank:	7	5.3
9. I like the variety of teaching methods (large groups, small groups, LAPs, etc.) used in the Little School Component.	Strongly Agree:	26	19.5
	Agree:	90	67.6
	Disagree:	15	11.3
	Strongly Disagree:	1	0.8
	Blank:	1	0.8
10. Teachers in the program seem to care about me more than most teachers I have known.	Strongly Agree:	31	23.3
	Agree:	84	63.1
	Disagree:	10	7.5
	Strongly Disagree:	1	0.8
	Blank:	7	5.3
11. The variety of teaching techniques used in the program fit my needs better as a student.	Strongly Agree:	17	12.8
	Agree:	95	71.4
	Disagree:	15	11.3
	Strongly Disagree:	2	1.5
	Blank:	4	3.0
12. How much help was the program in working out your plans for college or work after high school?	A great deal:	76	57.1
	Some:	50	37.6
	None:	3	2.3
	Blank:	4	3.0

f = frequency

TABLE 3 (CONTINUED)

Item	Response	f	%
13. I believe that the program will better prepare me for college than the regular program.	Yes:	80	60.1
	No:	17	12.8
	Not Planning on College:	21	15.8
	Blank:	15	11.3
14. I believe that the program will better prepare me to get a job after high school.	Strongly Agree:	13	9.8
	Agree:	78	58.6
	Disagree:	25	18.8
	Strongly Disagree:	10	7.5
	Blank:	7	5.3
15. Overall rating of the Little School Component.	Much better than the regular program:	85	63.9
	About the same:	31	23.3
	Not as good as the regular program:	16	12.0
	Blank:	1	0.8

f = frequency

N = 133

Item	Percent "Strongly Agree" or "Agree"
My relations with teachers seem better for learning than in the regular program.	90.2
Being in the Little School Component helped me take responsibility for my school work.	90.2
I like the variety of teaching methods (large groups, small groups, LAPs, etc.) used in the Little School Component.	87.1
Teachers in the program seem to care about me more than most teachers I have known.	86.4
The variety of teaching techniques used in the program fit my needs better as a student.	84.2
My interest in school became higher in the Little School Component.	81.9
I believe that the Little School has enabled me to study and learn more.	78.2
Being in the Little School Component has helped me be more confident of my school work.	71.4

Absences

Absence records were maintained by the Assistant Project Director for the period October 1, 1974 through March 11, 1975. For comparison purposes, records for 9 randomly selected Component and 9 randomly selected Non-component sections were maintained. The sections in each group averaged 30 students for a total of 270 students in the Component and Non-component groups. The month of September was omitted as there was a great deal of shifting of students among the sections. Absences were recorded every 8 to 10 school days. Mondays and Fridays and weeks including holidays were not included as these are the poorest attendance periods. Because of these omissions and the variation in the time period (8 - 10 days) over which absence records were

maintained; it is not possible to obtain an index of absences per school day. However, since the number of sections (9) and the total number of students in each group (270) are the same, a comparison between absences can be made. Table 4 shows the results of this analysis. Overall, the Non-component group had more absences than the Component groups. The difference was greater during the period preceding the Christmas holidays.

This lower absence rate for the Component groups is supporting evidence for the effectiveness of the Little Schools and is consistent with the findings of reports for the two preceding years.

TABLE 4

COMPARISON OF ABSENCES FOR NINE

COMPONENT AND NINE NON-COMPONENT SECTIONS

Time Period	Component Sections	Non Component Sections	Difference N	Difference %	Chi Square	Significance (Alpha)
Oct. 1 - Dec. 3, 1974	312	376	64	20.5	5.95	Yes-.025
Jan. 7 - March 11, 1975	374	396	22	5.9	0.63	No
Total Absences	686	772	86	12.5	5.07	Yes-.025
Number of Students	270	270				

Standardized Test Results

Scores of the Preliminary Scholastic Aptitude Tests (PSAT), taken in 1973-74 as juniors, and the Scholastic Aptitude Tests (SAT) taken this year as seniors, were obtained for those students who took the test. The students taking each test were then grouped into Component students and Non-component students. These tests were used in place of the California Tests of Basic Skills which were not given due to a test administration oversight.

Comparison of PSAT and SAT results can provide insights into gains in scholastic aptitude for the Component and Non-component students over a two year period. The tests are measures of scholastic aptitude oriented toward college bound students and are considered by many colleges in their admissions and placement programs. Although only a limited number of students at Woodson took the tests, the results (in the absence of a general achievement battery) can provide insights into the academic progress of students in each group.

The tests are parallel in form and structure and can be compared as pre-tests and post-tests. The PSAT is administered in the junior year to provide students with an opportunity to become familiar with these tests. Table 5 shows the results for the Math scores of the PSAT and SAT, and Table 6 shows the results for the Verbal scores. The score ranges for each test are presented in parallel at the left of each table to make easy the comparison of the PSAT and SAT results for the Component and Non-component students. Comparison of selected features of these tables indicates that Component students achieved greater progress from the PSAT to the SAT than did the Non-component students. The data at the bottom of each table shows that the percentage of students who scored 35 or higher on the PSAT or 350 or higher on the SAT increased for Component students (16.3% for Math and 10.1% for Verbal) but decreased for Non-component students (decrease of 4.8% for Math and 6.7% for Verbal), suggesting a larger gain for the Component students. In both Math and Verbal scores Component students had a smaller percentage scoring 35 or above on the PSAT (for Math, 18.1% of Component students vs. 34.3% of Non-component students; for Verbal, 20.5% of Component students vs. 32.9% of Non-component students). However, the opposite was true on the SAT taken one year later. On the Math SAT, students scoring 350 or above was 34.4% for Component students and 29.5% for Non-component students. On the Verbal SAT, 30.6% of Component students vs. 26.2% of Non-component students scored 350 or higher.

Although these differences in the SAT tests favored the Component students, the differences as measured by the z test were not statistically significant.

The z test of statistical significance showed significant gains (5% level of confidence or higher) for the gains of the Component students for Math and Verbal scores and for PSAT Math scores of Component vs. Non-component students. The remaining differences were not statistically significant. The trends in the data support the conclusion that Little Schools was having a significant impact on the achievement of its students.

(It was not possible to match individual PSAT and SAT records from the available data. The method of using the percentage of students above 35 on the PSAT and 350 on the SAT was used because means and standard deviations would be seriously distorted by the highly skewed distributions. The scores of 35 and 350 are one score category below the national means of 40 on the PSAT and 400 on the SAT.)

The number and percentage of students who took the PSAT and SAT is of interest when considered as an indicator of student interest in attending college, as many colleges consider these tests in their admissions programs. The results show (Table 5, item 3) that Component students seem to be less oriented to attending college (at least those colleges requiring the PSAT and SAT examinations) than Non-component students. About twice as many Non-component students (24%) as Component students (12%) took the SAT, while an equal percentage (15%) of both groups took the PSAT.

TABLE 5

PSAT AND SAT MATH SCORES OF COMPONENT AND NON-COMPONENT STUDENTS

Score Range PSAT	Score Range SAT	Component Students PSAT* f	Component Students PSAT* %	Component Students SAT** f	Component Students SAT** %	Non-Component Students PSAT* f	Non-Component Students PSAT* %	Non-Component Students SAT** f	Non-Component Students SAT** %
65-69	650-699							1	0.8
60-64	600-649							-	-
55-59	550-599							1	0.8
50-54	500-549	2	4.5	1	2.9	1	1.4	1	0.8
45-49	450-499	-	-	1	2.9	2	2.7	-	-
40-44	400-449	4	9.1	3	8.6	8	11.0	8	6.8
35-39	350-399	2	4.5	7	20.0	14	19.2	24	20.3
30-34	300-349	12	27.3	6	17.1	13	17.8	29	24.6
25-29	250-299	14	31.8	15	42.9	20	27.4	47	39.8
20-24	200-249	10	22.7	2	5.7	15	20.5	7	5.9
	Total	44	99.9	35	100.1	73	100.0	118	99.8
1. % of students scoring 35 or above on PSAT and 350 or above on SAT.			18.1		34.4		34.3		29.5
2. % Difference, PSAT vs. SAT.				+16.3				-4.8	
3. % of students taking test.			15		12		15		24
z test of significance				2.43 Sign.			2.02 Sign.	0.76 Not Sign.	0.54 Not Sign.

* PSAT taken as Juniors in 1973-74.

** SAT taken as Seniors in 1974-75.

TABLE 6

PSAT AND SAT VERBAL SCORES OF COMPONENT AND NON-COMPONENT STUDENTS

Score Range		Component Students				Non-Component Students			
PSAT	SAT	PSAT*		SAT**		PSAT*		SAT**	
		f	%	f	%	f	%	f	%
60-64	600-649							1	0.3
55-59	550-599			1	2.8	2	2.7	-	-
50-54	500-549	3	6.8	2	5.6	3	4.1	2	1.7
45-49	450-499	0	0.0	-	-	3	4.1	3	2.5
40-44	400-449	1	2.3	3	8.3	8	11.0	11	9.3
35-39	350-399	5	11.4	5	13.9	8	11.0	14	11.9
30-34	300-349	9	20.5	8	22.2	15	20.5	28	23.7
25-29	250-299	14	31.8	7	19.4	15	20.5	27	22.9
20-24	200-249	12	27.3	10	27.8	19	26.0	32	27.1
	Total	44	100.1	36	100.0	73	99.9	118	99.9
1. % of students scoring 35 or above on PSAT and 350 or above on SAT.			20.5		30.6		32.9		26.2
2. % Difference, PSAT vs. SAT.				+10.1				-6.7	
z test of significance				3.51 Sign.			1.51 Not Sign.	0.98 Not Sign.	0.51 Not Sign.

* PSAT taken as Juniors in 1973-74
** SAT taken as Seniors in 1974-75.

Considering the results of the standardized tests used in all three years, and positive results of school grades last year, Little Schools seems to have made a significant impact on student achievement. Use of a wide-range standardized achievement battery would probably bring out these gains in achievement much more clearly. With a new group of students entering the Little School next year, it is essential that a new test battery be included in the project evaluation. The test battery should include scores in academic areas in which Little Schools has been active, as well as in basic skill areas of reading and mathematics. The Sequential Tests of Educational Progress proved useful in the first year of the project and should be reconsidered. The Educational Development Series published by the Scholastic Testing Service might also be examined. It provides scores in Verbal and Non Verbal Abilities, Reading and English (Language Studies), Math and Science (Technical Studies), and in Social Studies. Individual parts of the total battery may be selected and a number of composite scores may be obtained.

The Individualized Curriculum For The Little Schools Component

Individualization as developed for the Little Schools component has emphasized the redevelopment of courses within the curriculum to better accommodate individual needs and differences. The basic framework for the redevelopment of courses within Little Schools has emphasized the development of Classroom Management Systems (CMS) and Learning Activity Packages (LAPs). Staff development activities for several years have emphasized training in these and other areas. Classroom Management Systems include a rationale, objectives, learning activities, physical classroom layout, media/equipment to be employed, criterion tests and methods of progress assessment. Learning Activity Packages are student oriented instructional packages designed to guide students through a series of instructional activities.

Table 7 shows the range of subjects and courses for which CMS and LAPs have been developed and a rating by the Project Director of the current status of development of CMS and LAPs. A wide range of courses have been developed in individualized format, with a judicious concentration on required courses as well as electives. Those subjects rated only "fair" in their development were generally those that were lowest in priority in terms of immediate student needs. Teachers working on several subjects therefore concentrated on those in which component students were to be enrolled.

Plans for further development, according to the Project Director, include as a first priority improvement in the available course packages; courses in physics, advanced biological science, shop courses, home economics, dietetics, Black history, law, geography, and remedial courses in reading and mathematics.

TABLE 7

CURRENT STATUS OF INDIVIDUALIZED COURSE DEVELOPMENT

Component Subject Courses	Required or Elective	Status of Materials Development - Classroom Man. System and/or IAP:
English	Require three years	
10th Grade	for college prep-	Fair
11th Grade	aration	Good
12th Grade		Good
Social Studies	Two years required	
10 - World History		Fair
11 - American History		Good
12 - Government		Good
Sciences	One year required	
Earth Science	if not taken in the	Fair
Biological Science	9th grade	Very Good
Chemistry		Very Good
Foreign Languages	Electives	
French		Good
Spanish		Good
Business	Electives	
Office Machines		Good
Bookkeeping and Accounting		Good
Art	Elective	

Teacher Reactions To The Little School Component

Data on teachers activities in the Little School Component and their attitudes toward the program were obtained from a teachers questionnaire. The questionnaire was designed to obtain information in two areas from Non-component as well as Component teachers. The two areas to which Non-component teachers responded were: question 3 - variety of teaching methods and materials used, and question 4 - ratings of their students. In addition, Component teachers were asked to rate various aspects of the program and to indicate areas of individualized instruction for which they felt additional staff development may be needed.

The questionnaire was completed by 11 of 14 Component teachers and 30 Non-component teachers in May and June 1975. The three Component teachers who did not complete the questionnaire were not available due to serious illness or unavailability.

Of the eleven Component teachers, 6 had been teaching in the Little School for all three years, 4 teachers for two years, and only 1 teacher within the current school year.

Teaching Methods

The detailed data showing the varied teaching techniques used by Component and Non-component teachers is presented in Table 8. A number of important points about this data are also summarized in Table 9.

There are a number of observations that should be made regarding the responses of Component teachers (Table 8). First, Component teachers as a group used the entire set of teaching methods and materials, and used them to a greater extent than did Non-component teachers.

Rarely did Component teachers indicate that they "Never" used the teaching method: Only four items were so marked (never used) as follows:

e.	Mini-units	1 teacher
q.	Team teaching	2 teachers
r.	Programmed instruction materials	1 teacher
s.	Teaching machines	3 teachers.

TABLE 8

TEACHING METHODS AND MATERIALS USED BY COMPONENT AND NON-COMPONENT TEACHERS

Item		Component Teachers				Non-component Teachers			
		Very Often	Often	Some-times	Never	Very Often	Often	Some-times	Never or Blank
a. Large groups	f	4	4	3	-	12	8	6	4
	%	36.4	36.4	27.3	-	40.0	26.7	20.0	13.3
b. Small groups	f	7	4	-	-	8	11	7	4
	%	63.6	36.4	-	-	26.7	36.7	23.3	13.7
c. Audio-visuals	f	6	5	-	-	11	11	8	-
	%	54.5	45.5	-	-	36.7	36.7	26.7	-
d. Learning Activity Packages	f	3	5	3	-	8	8	11	3
	%	27.3	45.5	27.3	-	26.7	26.7	36.7	10.0
e. Mini-units	f	3	2	5	1	3	9	13	5
	%	27.3	18.2	45.5	9.1	10.0	30.0	43.3	16.7
f. Contracts	f	1	1	9	-	3	6	13	8
	%	9.1	9.1	81.9	-	10.0	20.0	43.3	26.7
g. Study guides	f	7	2	2	-	15	7	6	2
	%	63.6	18.2	18.2	-	50.0	23.3	20.0	6.7
h. Work sheets	f	7	4	-	-	14	10	6	-
	%	63.6	36.4	-	-	46.7	33.3	20.0	-
i. Open classrooms	f	7	3	1	-	4	9	10	7
	%	63.6	27.3	9.1	-	13.3	30.0	33.3	23.3
j. Peer facilitators or youth teaching youth	f	4	5	2	-	6	15	7	2
	%	36.4	45.5	18.2	-	20.0	50.0	23.3	6.7

f = frequency
N = Component teachers - 11; Non-component teachers - 30
Percentages add to 100.0 within rounding error.

TABLE 8 (CONTINUED)

Item		Component Teachers				Non-component Teachers			
		Very Often	Often	Some-times	Never	Very Often	Often	Some-times	Never or Blank
k. Independent study	f	4	5	2	-	5	16	9	-
	%	36.4	45.5	18.2	-	16.7	53.3	30.0	-
l. Criterion referenced testing	f	4	4	3	-	3	10	8	9
	%	36.4	36.4	27.3	-	10.0	33.3	26.7	30.0
m. Student assessment	f	6	4	1	-	10	13	2	5
	%	54.5	36.4	9.1	-	33.3	43.3	6.7	16.7
n. Teacher-student planning conferences	f	1	5	5	-	6	13	11	-
	%	9.1	45.5	45.5	-	20.0	43.3	36.7	-
o. Student oriented objectives	f	5	5	1	-	14	6	5	5
	%	45.5	45.5	9.1	-	46.7	20.0	16.7	16.7
p. Student developed objectives	f	1	3	7	-	9	9	9	3
	%	9.1	27.3	63.6	-	30.0	30.0	30.0	10.0
q. Team teaching	f	3	1	4	2	3	4	15	8
	%	27.3	9.1	36.4	18.2	10.0	13.3	50.0	26.7
r. Programmed instruction materials	f	1	2	7	1	4	10	11	5
	%	9.1	18.2	63.6	9.1	13.3	33.3	36.7	16.7
s. Teaching machines	f	1	1	6	3	4	6	8	12
	%	9.1	9.1	54.5	27.3	13.3	20.0	26.7	40.0

f = frequency
N = Component teachers - 11; Non-component teachers - 30
Percentages add to 100.0 within rounding error.

Programmed materials and teaching machines have not been emphasized in the Little Schools, and a structured program of team teaching has been undertaken only in certain subjects. Therefore, one would expect that some Component teachers might not have used these approaches.

In contrast, some (from 2 - 15) Non-component teachers reported never using 14 of 19 of the teaching methods listed (Table 8). The four teaching methods that were used at least "Sometimes" by Non-component teachers were: c. Audio-visuals; h. Work sheets; k. Independent study; and n. Teacher-student planning conferences.

Second, the teaching methods that Component teachers reported using "Very Often" reflected methods emphasized by Little Schools. The methods marked by a majority (50% or more) of the Component teachers as used "Very Often" were:

b.	Small Groups	7 teachers
g.	Study guides	7 teachers
h.	Worksheets	7 teachers
i.	Open Classrooms	7 teachers
c.	Audio-Visuals	6 teachers
m.	Student assessment	6 teachers.

In contrast, not even one teaching method was marked as used "Very Often" by a majority of Non-Component teachers.

Third, a larger percentage of Component than Non-component teachers marked most teaching methods emphasized by Little Schools as used "Very Often" and/or "Often". Table 9 shows this contrast. Fourteen of the 19 teaching methods were marked by a larger percentage of Component than Non-component teachers as used "Very Often" or "Often" (items marked X in last two columns). The remaining five teaching methods were used by a larger percentage of Non-component teachers. Two of these items (r. Programmed Instruction Materials and s. Teaching Machines) are not emphasized by Little Schools. The other three methods (f. Contracts, n. Teacher-student planning conferences, and p. Student developed objectives) may have been adopted by many Non-component teachers as a result of experiences with Little Schools or experiences with them elsewhere. It must also be emphasized that in the three years of its preparation many Non-component teachers have benefitted from staff development, innovative practices, and the example of the Project Director (who is also an Assistant Principal). The Little School efforts to introduce varied teaching techniques have also had an impact on Non-component teachers. If not for this, the difference might be even larger.

The fourth and final point related to teaching methods is that related to certain methods emphasized by Little Schools that have not been used "Very Often" or "Often" by Component teachers.

TABLE 9

TEACHING METHODS AND MATERIALS USED "VERY OFTEN" OR "OFTEN" BY COMPONENT AND NON-COMPONENT TEACHERS[1]

Item	Component Teachers f	Component Teachers %	Non-Component Teachers f	Non-Component Teachers %	Used More by:[2] C	Used More by:[2] NC
a. Large groups	8	72.8	20	66.7	X	
b. Small groups[3]	11	100.0	19	63.4	X	
c. Audio-visuals[3]	11	100.0	22	73.4	X	
d. Learning Activity Packages[3]	8	72.8	16	53.4	X	
e. Mini-units[3]	5	45.5	12	40.0	X	
f. Contracts[3]	2	18.2	9	30.0		X
g. Study guides[3]	8	81.8	22	73.3	X	
h. Work sheets[3]	11	100.0	24	79.9	X	
i. Open classrooms[3]	10	89.9	13	43.3	X	
j. Peer facilitators or youth teaching youth[3]	9	81.9	21	70.0	X	
k. Independent study[3]	9	81.9	21	70.0	X	
l. Criterion referenced testing[3]	8	72.8	13	43.3	X	
m. Student assessment[3]	10	90.9	23	76.6	X	
n. Teacher-student planning conferences[3]	6	54.6	19	63.3		X
o. Student oriented objectives[3]	10	90.9	20	66.7	X	
p. Student developed objectives[3]	4	36.4	18	60.0		X
q. Team teaching[3]	4	36.4	7	23.3	X	
r. Programmed instruction materials	3	27.3	14	46.6		X
s. Teaching machines	2	18.1	10	33.3		X

Sign test significant at the 1% level of confidence.

N = Component Teachers - 11; Non-Component Teachers - 30

1 - from data in Table 8.

2 - X in the C column indicates that a larger percentage of Component teachers used the method; an X in the NC column indicates that a larger percentage of Non-component teachers used the method.

3 - Methods emphasized by Little Schools.

Methods emphasized by Little Schools that haven't been used "Very Often" by Component teachers include:

f.	Contracts	2 teachers used "Very Often" or "Often"
p.	Student Developed Objectives	4 teachers used "Very Often" or "Often"
e.	Mini-units	5 teachers used "Very Often" or "Often"
n.	Teacher-student planning conferences	6 teachers used "Very Often" or "Often" (all should do so)
l.	Criterion referenced testing	8 teachers used "Very Often" or "Often" (all should do so).

Considering the emphasis placed on these methods in staff development, more extensive use of them by Component teachers should be expected. The Little Schools staff should review these findings from the point of view of the appropriateness of using these methods in their courses more often.

In summary, the results of these data show the wide variety of teaching methods and materials used by Component teachers. The sign test was used to test the statistical significance of the differences between Component and Non-component teachers in response to these questions (Table 9). Differences in the percentages between the Component and Non-component teachers were marked "plus" if (1) the difference favored Component teachers on methods emphasized by Little Schools, or (2) in methods not emphasized by Little Schools differences favored Non-component teachers or there was no difference. Differences in percentages were marked "minus" if differences favored Non-component teachers for methods emphasized by Little Schools. With 16 "pluses" and 3 "Minuses" (items f, n and p) the sign test is significant at the 1% level of confidence.

Participating Component teachers were asked to rate their team teaching experiences. As shown in Table 10, the six participating teachers rated their team teaching experiences favorably.

TABLE 10

PERCEPTIONS OF TEAM TEACHING EXPERIENCES

OF SIX COMPONENT TEACHERS

Item	SA	A	D	SD	Bl
a. Team teaching gives more time for preparation and planning.	2	3	0	0	1
b. Students benefit more from presentations by two teachers.	3	2	1	0	0
c. Student groups are too large in team teaching.	0	0	4	1	1
d. Coordination with the other member of my team is a problem.	0	0	2	4	0

Key: SA - Strongly Agree
A - Agree
D - Disagree
SD - Strongly Disagree
Bl - Blank

Teacher Ratings of Their Classes

Component and Non-component teachers were asked to rate their classes in 10 areas emphasized by the Little School Component. Eight of the items request ratings of the students (a - e, g - i) in their classes. One item rates student teacher communications (f) and one item (j) was included to cross-validate teacher perceptions of the variety of teaching techniques used. Five items (e, f, g, h, and i) were included that were similar to items asked of students in order to compare student and teacher perceptions.

The results are shown in Table 11. Comparing the ratings of Component and Non-component teachers shows that in every case the responses of Component teachers were more favorable ("Strongly Agree" or "Agree") than Non-component teachers. Using the sign test, with

10 "pluses" and no "minuses" the differences in the ratings are significant at the 1% level of confidence. Overall, Component teachers hold a more favorable opinion of their classes.

All 11 or 100% of the Component teachers marked "Strongly Agree" or "Agree" to the following four statements:

--Students in my classes work readily in groups;
--The quality of student participation is good -- they ask intelligent questions, discuss an issue completely, and give complete answers;
--Students accept responsibility for their school work;
--I use a large variety of teaching techniques in my classes.

Particularly noteworthy is the finding on the quality of student participation and their acceptance of responsiblity for their schoolwork, two areas of great importance in academic and personal growth and development. Four Component teachers and 17 Non-component teachers disagreed with the statement (h) that their students have good study habits. This problem should be given further attention by both teachers and counselors.

It should be noted that the majority of Non-component teachers marked "Strongly Agree" or "Agree" to 9 out of the 10 items, making the differences between Component teachers even more notable.

The results of the cross-validation item (j) regarding teacher perceptions of using varied teaching techniques shows the validity of listing the teaching techniques used. All 27 Non-component teachers who answered the question agree with the statement that they use a large variety of teaching techniques. However, they tended not to use many of those techniques listed. (See previous section.)

TABLE 11

RATINGS OF STUDENTS BY LITTLE SCHOOL COMPONENT TEACHERS AND NON-COMPONENT TEACHERS

Response Categories*: SA - Strongly Agree
A - Agree
D - Disagree
SD - Strongly Disagree
Bl - Blank

Item	RC*	Component		Non-Component	
		f	%	f	%
a. Students in my classes work readily in groups.	SA	10	90.9	13	43.3
	A	1	9.1	14	46.7
	D	0	0.0	0	0.0
	SD	0	0.0	1	3.3
	Bl	0	0.0	2	6.7
b. Attendance is much better than average.	SA	2	18.2	4	13.3
	A	8	72.7	18	60.0
	D	0	0.0	5	16.7
	SD	0	0.0	1	3.3
	Bl	1	9.1	2	6.7
c. Students participate fully in class activities.	SA	7	63.6	11	36.7
	A	3	27.3	13	43.3
	D	1	9.1	3	10.0
	SD	0	0.0	0	0.0
	Bl	0	0.0	3	10.0
d. The quality of student participation is good -- they ask intelligent questions, discuss an issue completely, and give complete answers.	SA	5	45.5	6	20.0
	A	6	54.5	18	60.0
	D	0	0.0	4	13.3
	SD	0	0.0	0	0.0
	Bl	0	0.0	2	6.7
e. Students accept responsibility for their school work.	SA	3	27.3	3	10.0
	A	8	72.7	18	60.0
	D	0	0.0	5	16.7
	SD	0	0.0	1	3.3
	Bl	1	9.1	3	10.0

N = Component Teachers - 11; Non-component Teachers - 30.
Percentages add to 100.0 within rounding error.

TABLE 11 (CONTINUED)

Response Categories*: SA - Strongly Agree
A - Agree
D - Disagree
SD - Strongly Disagree
Bl - Blank

Item	RC*	Component		Non-Component	
		f	%	f	%
f. Communication between students and teacher is more than satisfactory.	SA	7	63.6	12	40.0
	A	3	27.3	13	43.3
	D	0	0.0	2	6.7
	SD	0	0.0	0	0.0
	Bl	1	9.1	3	10.0
g. Students are very interested in their school work.	SA	4	36.4	5	16.7
	A	6	54.4	16	53.3
	D	1	9.1	6	20.0
	SD	0	0.0	0	0.0
	Bl	0	0.0	3	10.0
h. Most of my students have good study habits.	SA	0	0.0	2	6.7
	A	7	63.6	9	30.0
	D	4	36.4	17	56.6
	SD	0	0.0	0	0.0
	Bl	0	0.0	2	6.7
i. Students seem to be confident of their school work.	SA	2	18.2	3	10.0
	A	7	63.6	12	40.0
	D	2	18.2	12	40.0
	SD	0	0.0	0	0.0
	Bl	0	0.0	3	10.0
j. I use a large variety of teaching techniques in my classes.	SA	6	54.5	18	60.0
	A	5	45.5	9	30.0
	D	0	0.0	0	0.0
	SD	0	0.0	0	0.0
	Bl	0	0.0	3	10.0

Sign test significant at the 1% level of confidence.

N = Component Teachers - 11; Non-component Teachers - 30.
Percentages add to 100.0 within rounding error.

Table 12 compares the perceptions of Little School students and teachers in certain areas. Student data was taken from the General High School Program Questionnaire. While all ratings are generally favorable, a larger percentage of teachers than students (63.6 vs. 53.9) "Strongly Agree" that student-teacher communications have improved. Students, on the other hand, more often see themselves as accepting responsibility (43.6% vs. 27.3%), having good study habits (50.0% vs. 0.0%), and being confident of their schoolwork (41.0% vs. 18.2%). Students and teachers held similar perceptions of the students' interest in school.

TABLE 12

COMPARISON OF LITTLE SCHOOL STUDENT AND TEACHER PERCEPTIONS

Item Description	RC*	Student Perceptions[1]	Teacher Perceptions
1. Students accept responsibility.	SA	43.6	27.3
	A	50.0	72.7
	O	6.4	0.0
2. Interest in school.	SA	34.6	36.4
	A	51.3	54.5
	O	14.1	9.1
3. Study Habits.	SA	50.0	0.0
	A	46.1	63.6
	O	3.9	36.4
4. Student confidence in school work.	SA	41.0	18.2
	A	52.5	63.6
	O	6.5	18.2
5. Student-teacher communication.	SA	53.9	63.6
	A	41.0	27.3
	O	5.1	9.1
	N	78	11

* Response Categories: SA - Strongly Agree
A - Agree
O - Other (Disagree, Strongly Disagree, or Blank)

1 - From General High School Program Questionnaire

Staff Development

An important part of the Little Schools program is the training of teaching staff in the development and application of individualized methods of instruction. Workshops have been held each year emphasizing selected topics in individualization and humanistic teaching; selected staff have visited a number of schools with exemplary individualized programs; and inservice training has been a continuing and ongoing process under the leadership of the Project Director and Assistant Project Director.

The importance of a sound staff development program to the development of an exemplary program of individualization cannot be emphasized too strongly. The Project Director holds the point of view that Staff Development is the key to a successful program and that it must be continued over an extended period, at least three years, to be totally effective. Furthermore, workshops and related time are also needed for developing individualized materials in order for Little Schools to properly discharge its function of disseminating program information to the interested educational community.

Based on experience in developing, implementing, and evaluating individualized programs, this evaluator concurs with the opinion of the Project Director of the key role played by a sound staff development program and the need for released time and/or workshops to develop or assemble instructional packages. Without these developmental opportunities most individualized programs flounder. Time limitations, furthermore, seriously limit the quality, usefulness, and exportability of the project experience.

As the project was in its third year and 10 of the 11 teachers had been with the project for two or three years, it was decided to assess staff development in terms of continuing needs of teachers in the development of additional competencies in various areas of individualized instruction employed at the Little School. Their responses could also be compared to the teaching methods and techniques used to provide a basis for further consideration of staff development needs.

Component staff were asked to respond to the statement: "Based on the workshop, staff development, and other experiences please check the areas in which you feel competent and those in which you feel you need further assistance." The results are presented in Table 13. Those areas marked most often as those

in which teachers need assistance are: s. Indexing and classifying learning materials for ability levels and p. Student developed objectives. Those areas which may require further attention, mostly in individual cases, are those areas in which 8 or more teachers felt competent, including: c. Large group instruction, d. Small group instruction, e. Mini-units, g. Study guides, h. Work sheets and k. Independent study. (Those who left the items blank may have felt that an intermediate response was needed between "competent" and "need assistance" that would reflect a consolidation through experience of developed skills. If this is the case, it is most appropriate to consider no response as requiring further staff development and/or experience.) Comparison to Table 8, however, shows that Independent study was not used very often by many Component teachers and should therefore be added to the list of those areas considered for attention in staff development. These areas are marked in Table 13.

TABLE 13

STAFF DEVELOPMENT ASSESSMENT

AND NEEDS ANALYSIS

	Teacher Perceptions			Used Very Often [1]	Consider for Staff Development [2]
	Competent	Need Assistance	Blank		
a. Developing classroom management system	6	2	3	NA	X
b. Developing learning materials	6	3	2	NA	X
c. Large group instruction	9	0	2	4	
d. Small group instruction	8	1	2	7	
e. Mini-units	8	0	3	3	
f. Contracts	5	3	3	1	X
g. Study guides	8	1	2	7	
h. Work sheets	8	1	2	7	
i. Open classrooms	6	3	2	7	X
j. Peer facilitators	7	1	3	4	X
k. Independent study	8	1	2	4	X
l. Criterion referenced testing	7	2	2	4	X
m. Student assessment	5	3	2	6	X
n. Teacher-student planning conferences	6	2	2	1	X
o. Student oriented objectives	6	2	2	5	X
p. Student developed objectives	4	5	2	1	X
q. Team teaching	7	2	2	3	X
r. Teacher advisor role	6	3	2	NA	X
s. Indexing and classifying learning materials for ability levels	2	7	2	NA	X

[1] - Number of teachers indicating they used this method "very often".
N = 11 Component Teachers

[2] - X in this column is based on the perceived needs of teachers for staff development (the number of teachers who "need assistance" or left the item blank) and the actual use of the teaching method (number who used the method "very often").

NA - item not asked.

Component Teachers' Evaluation Of Little Schools

All eleven component teachers indicated that support services such as supplies and equipment "need improvement," a matter that was underscored continually by the Project Director and all staff members interviewed by the evaluator. Serious problems have been encountered in filling orders for audio-visuals and other equipment needed for the project and the lack of budgeted secretarial assistance. In preparing for dissemination activities, improved duplicating equipment will also be needed (Table 14).

With this exception, Little Schools is given high marks by participating teachers. Particularly noteworthy are the high marks for interpersonal relations among staff and students with 9 teachers marking "good."

Teachers written comments are summarized in Table 15. The table summarizes the teachers views of the strengths and weaknesses of Little Schools and ways in which it could be improved. The strengths listed amplify and support data presented earlier, emphasizing staff relationships, improved teaching methods, and benefits for students. The weaknesses and suggestions for improvement focus, as before, on the inadequacy of materials, supplies, funds, and typing and clerical assistance. Additionally, a full-time director or assistant director was recommended. Some teachers also expressed the need for additional time for planning, preparation, or for meeting with students and parents.

TABLE 14

TEACHER EVALUATION OF

LITTLE SCHOOLS

	Good	Acceptable	Needs improvement	Blank
a. Planning and Communications	5	5	1	0
b. Scheduling	5	4	2	0
c. Team Operations	6	3	0	2
d. Support services (supplies, equipment, etc.)	0	0	11	0
e. Cooperation from the administrative staff	7	2	0	2
f. Relations among component staff	9	0	0	2
g. Student/teacher relations	9	0	0	2

h. Comparing this year to last year, the operations of the Little School Component are:
- 2 - much better;
- 5 - better;
- 2 - about the same;
- 0 - not as good;
- 2 - Blank.

i. Overall rating of the Little School Component:
- 3 - Outstanding;
- 6 - Good;
- 0 - Fair;
- 0 - Poor;
- 2 - Blank.

TABLE 15

TEACHERS' COMMENTS

STRENGTHS, WEAKNESSES, IMPROVEMENTS

Strengths Of the Little School Component

Comments		f	
1.	Administration and Staff		15
	a. Cooperation	4	
	b. Positive leadership and organization	3	
	c. Communication	2	
	d. Sharing ideas and knowledge	2	
	e. Competent and dedicated staff	2	
	f. Encourages staff creativity and innovation	1	
	g. Teacher-advisor role	1	
2.	Teaching Methods		14
	a. Individualization of Instruction	3	
	b. Team teaching	2	
	c. Independent study	2	
	d. (One each) Classroom Management, small group instruction, student assessment, criterion referenced testing, peer facilitators, innovative techniques, learning activities outside the classroom	7	
3.	Students		12
	a. Improved student/teacher relationships	4	
	b. Cohesiveness among students	2	
	c. Positive atmosphere for learning	2	
	d. (One each) Improved attendance, independence of students, students taught on their level, attack learning gaps	4	
	TOTAL STRENGTHS -		41

Weaknesses Of The Little School Component

Comments	f
1. Inadequate materials, supplies, texts and storage	9
2. Lack of funds	4
3. Lack of typing and clerical assistance	3
4. More planning time	3
5. Communication	2
6. Overcrowded classrooms	2
7. Need alternate forms of course tests	1
8. Physical plant limitations for team teaching and open space techniques	1
TOTAL WEAKNESSES	25

Ways In Which The Little School Component Could Be Improved

1. Resources		12
a.	More supplies, equipment, and materials	8
b.	More funds	3
c.	Space for resource work area	1
2. Staff		11
a.	Teacher assistance, typist, clerical staff	6
b.	Para-professionals	3
c.	Full-time director or assistant director	2
3. Other		5
a.	More planning time	2
b.	Released time for materials preparation	1
c.	More time to meet with students and parents	1
d.	Smaller classes	1
TOTAL IMPROVEMENTS -		28

Results of Interviews and Observations

The Project Director, Assistant Project Director and the Counselors were interviewed; direct observations were made of four classes in session; an audio-visual presentation of Little Schools was reviewed; and a brief review of selected staff developed materials was carried out.

Interviews and observations support the need for additional personnel and resources for the project, particularly for more released time for the Project Director to devote to Little Schools. As an Assistant Principal at Woodson the division of time presents many difficulties. Although an Assistant Project Director was assigned, a full-time person is needed for this position to handle many of the day-to-day tasks that arise. Unfortunately, the Assistant Project Director was seriously injured during the year and was out on sick leave, placing an even heavier burden for end of year tasks on the Project Director and Little School staff.

It should also be noted that two other staff members were lost to the project during the year due to extended illness. The absences of these trained personnel undoubtedly dimminished the overall impact of the project.

The need for a full-time clerk-typist assigned to the project was clearly in evidence throughout many of the on-site observations and interviews. A program dedicated to developing instructional packages and a program of individualized instruction worthy of dissemination requires immediate on-call services for typing, filing, reproducing, collating, and distributing project developed materials. The assignment of a full-time clerk-typist would enable the project staff to brings its materials and files up-to-date and ready for dissemination.

Finally, the project requires the addition of a high speed Xerox for duplicating materials for distribution.

Classroom observations and the review of staff developed materials served to confirm the efficacy of Little Schools developed teaching methods. Observation was made of four different classes each using some variation of teaching techniques emphasized by Little Schools -- e.g.; team teaching; small group discussion; a small group viewing a slide-tape presentation with a study guide to focus on key points, while other students in the same class pursued other projects in small groups or independently; students learning to use business

machines following instructor-prepared guides and audio-visual instructions, while others in the class worked on improving their skills on various machines; and others. Students queried during these observations liked the independence and responsibility accorded to them by the varied teaching approaches.

Parental involvement, according to the Project Director, has been achieved by keeping parents informed of the program, inviting them to comment upon their children's participation and the progress the students have made while in the program.

Summary of Results

The results of the evaluation clearly indicate support for the Little School Component's achievement of its goals, particularly in the areas of developing a viable program of individualized instruction and in creating a positive atmosphere for learning. The evidence for the program shows:

1. Component teachers compared with Non-component teachers, as a result of staff development and project experience, use more varied teaching methods; use those methods emphasized by Little Schools more often than Non-component teachers; emphasize individualization more than Non-component teachers (see section on Teaching Methods).

2. Component teachers as compared with Non-component teachers perceive their students more favorably in such areas as class participation, accepting responsibility for their school work, communication between student and teacher, students' interest in their school work, study habits, and students' confidence in their school work (see section on Teachers' Ratings of Their Classes).

3. Component teachers give the Little Schools high marks in all areas, with the exception of needed support services (supplies, clerk-typist). Specific strengths, weaknesses, and means of improvement are worth noting in the section on Component Teachers' Evaluation of Little Schools.

4. Staff development has made a good deal of progress. However, a number of areas identified need further attention and should be reviewed by the project staff.

The results for students show:

1. Lower absences for Component vs. Non-Component students.

2. Component students compared with Non-Component students (at a different high school) show more positive attitudes in areas such as "have good relations with most of my teachers; have become more confident of my school work; understand what my teacher expects of me; have a good understanding of how I am doing in my school work; have learned how to take responsibility for my school work; very interested in school; know how to study and learn."

3. Component students give Little Schools high marks in all areas including student-teacher communications and their personal scholastic development.

4. Component students compared with Non-Component students (at a different high school) confirm that their teachers use more varied teaching techniques and perceive this as helpful to their learning.

5. Component students feel that Little Schools has prepared them better for college or work after high school.

6. A larger percentage of Component than Non-Component students show improvement in the standardized tests, the PSAT administered in the junior year and used as the "pretest" and the SAT administered in the senior year and used as the "posttest". Although Component students tended to score higher on the SAT Math and Verbal scores, the differences were not statistically significant.

CHAPTER IV
RECOMMENDATIONS

Based on the findings reported in the previous chapter a number of recommendations are offered for consideration. These recommendations are made in the expectation that they will help the Project, the D.C. Public Schools, and the educational community reap the full benefit of this program of individualized instruction.

1. The Little School Component should definitely be continued and its role expanded, as currently planned, into the dissemination phase of the program. Little Schools has clearly demonstrated its impact on students and teachers alike in creating a positive atmosphere for learning, in developing a varied program of individualized instruction, in improving classroom teaching, and in improving attendance. Although the evidence for student achievement is not completely clear, there is enough to suggest that improvements in student achievement have also been made.

2. Little Schools should be given sufficient support and resources to effectively carry out its role. Essential here are: more released time from other duties for the Project Director, a full-time Assistant Project Director, a full-time clerk-typist, and reproduction equipment (Xerox).

3. Staff development workshops should be continued for current staff, with released time and/or stipends for extra time (especially summer) to give the staff time to further develop and consolidate its work in developing inidividualized materials. Although much progress has been made, additional courses and teaching methods are in need of development and improvement. To cut this effort short at this time would be wasteful of the money and effort already expended, and would not provide as much information for dissemination purposes.

4. A staff development program for teachers new to Little Schools and/or individualization would prove invaluable in taking full advantage of the Little Schools experience.

5. A wide range standardized achievement test battery should be employed in the evaluation in order to reflect the major course areas typical at the high school level. The STEP tests or the Educational Development Series may be suitable.